

IN THE CLAIMS:

1. (Previously Presented) An apparatus for managing subscription requests in a multicast messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the apparatus comprising:

a computer, wherein the computer comprises:

a matching engine, wherein the matching engine receives a subscription request pointing to topic information in which a requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy, parses the subscription request to determine if the request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard, locates a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard, instructs the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.

2. (Previously Presented) The apparatus of claim 1 comprising:
means for assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard.

3. (Previously Presented) The apparatus of claim 2, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard is inherited from parent topic information

4-6. (Canceled)

7. (Previously Presented) A computer program embedded on a computer readable medium comprising program code adapted to perform, managing subscription requests in a multicast messaging system when said program code is run on a computer, the messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the computer program comprising program code adapted to perform, the steps of:

- receiving a subscription request pointing to topic information in which a requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

- parsing the subscription request to determine if the request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard;

- locating a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard; and

- instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix .

8. (Previously Presented) The computer program of claim 7, wherein the program code means is also adapted to perform the following step when said program is run on a computer:

- assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard.

9. (Previously Presented) The computer program of claim 8, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard is inherited from parent topic information.

10. (Previously Presented) A data processing system for managing a multicast messaging

system for managing subscription requests, the data processing system comprising:

- a bus;

- a memory connected to the bus, wherein the memory includes computer program code; and

- a processor coupled to the bus, wherein the processor executes the computer program

code to a message broker; a plurality of publishers publishing information to the message broker;

a plurality of subscribers subscribing to information received from one or more publishers, the subscribers comprising:

- the message broker, the

message broker comprising:

- a matching engine, wherein the matching engine receives a subscription request pointing to topic information in which a requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

- a parser, wherein the parser parses the subscription request to determine if the request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard and, wherein the parser locates a node in the topic tree defined in the prefix, wherein the node represents a topic immediately preceding the wildcard; and

- an instructor, wherein the instructor instructs the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.